1. Introduction

There is a large and extensive literature on executive pay which overwhelmingly draws on agency theory in shaping study of the determinants of fixed cash-based salary and variable "at risk" elements (such as stock options and performance contingent bonuses) as well as the optimal mix of these two categories in director compensation packages. However while this has led to extensive development of normative and positive agency perspectives, where the latter is derived from empirical studies, a shortfall is in their predominant focus on compensation as a form of ex-ante incentive alignment between residual risk-bearing principals and their managerial agents. In this light the role of nonexecutives, and in particular independent nonexecutives, is in the provision of monitoring of insiders thereby mitigating moral hazard (shirking, expropriation and suboptimal decision-making and behaviours) of insider executives. Thus the implications of board diversification and boundary-spanning roles of directors is largely viewed in terms of their relative "busyness" in terms of their reduced ability in providing monitoring of executives. Despite early attempts in exploring board diversification and executive compensation (Hillman and Dalziel, 2003) where advances in the integration of agency and resource dependency theories were undertaken, there is a dearth of literature focussing on the implications of such boundary-spanning directors on board performance and remuneration. This is despite considerable recent evidence regarding the importance of diversified boards in alleviating environmental uncertainties and mitigating informational asymmetries where these are of particular importance in emerging economies.

Social elites are of particular importance in emerging economies where these can be non-exhaustively defined in terms of elevated status and backgrounds in military, government, commercial and university. Their importance can be attributed both to their boundary-spanning ability but also to their social connectivity and relationships where these are especially important in alleviating transactions costs encountered by firms in lieu of often dysfunctional or non-existent markets for factors of production, labour, products and capital. This underscores their predominant recruitment to boards across emerging economies worldwide. However despite their importance and prevalence there is a lack of studies regarding their impact on board dynamics and

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remuneration. There is also a gap in terms of the mediation of these presence of these directors by institutional quality –which is likely owing to their importance in mitigating the transactions costs occurring due to weak institutional quality. Thus consideration of the impact of social elites on boards and their mediation by institutional quality forms our first contribution to the literature.

In focussing on the impact of social elites on executive compensation we draw on ubiquitous agency theory while integrating this with an institutionally-derived perspective. This builds on nascent attempts by Aguilera and Jackson (2003) in integrating these perspectives. Institutional theory yields a broad socially contextualized visualization of the relationships transcending the focal firm and influencing executive salary. This provides a natural countenance to the largely socially under-contextualized agency theory and facilitates the understanding of the recruitment and retention of social elites in terms of firm's attainment of social and institutional legitimacy. These deeper societal considerations are particularly important in the context of emerging economies given the often complex myriad of religious, societal, cultural, political and informal institutions prevalent. Our integration of agency and institutional perspectives builds on prior work of Aguilera and Jackson (2003) but provides an empirical test in the form of institutionally derived constructs, namely social elites, on executive incentives (salary). This forms our second contribution.

The overwhelming majority of the board compensation literature focuses on larger listed firms with longer operating histories (Beatty and Zajac, 1994). Compensation practices are therefore often a combination of historical tradition and bureaucratization prevalent in these older firms (Baker et al, 1988). As such focussing on firms undergoing initial primary offerings (IPOs) provides a unique setting in which the focal firm opens its organizational structure to minority investors for the first time, where agency relationships are more visible than in any other time in the firm's lifecycle. This marks a strategic juncture in the firm's lifecycle (Brav and Gompers, 2003) where the firm necessarily decides on the both the appropriate level of compensation and its appropriate or optimal mix, in terms of fixed and variable components. However an additional feature of our study is in our focus on emerging economies where "closed" as opposed to "open" labour markets are prevalent (Aguilera and Jackson, 2003). The former being associated with

managerial contractual longevity within single firms and at best extremely limited external labour markets for their talents and services, which is common across emerging economies, while the latter is typified by large, well developed active labour markets (Aguilera and Jackson, 2003). This has a direct impact on compensation mix with firm's minimally resorting to variable forms of compensation (such as stock options and bonuses) in more closed labour markets. Our focus on emerging economy IPO firms differentiates our study from the handful of previously undertaken studies on IPO firms where these have predominantly centred on developed US and UK where these are notably open-labour markets. Thus our study is unique in focussing on emerging economy IPO firms while its singular focus on fixed cash-salary is justified by the closed nature of labour markets prevalent across emerging economies. This is our third contribution.

We undertake a unique focus on African emerging economy IPOs as Africa is an understudied region while it exhibits many of the features of broader emerging economies worldwide thereby facilitating the generalizability of our results. The continent has some of the highest variance in institutional quality worldwide ranging from the weakest, such as Cote d'Ivoire, Nigeria and Sierra Leone, to some of the strongest, such as Botswana, Mauritius and South Africa, that are on a par with Western Europe (Transparency International, 2014).

Our findings suggest…………………..

We proceed with section 2 outlining the background theory and deriving hypotheses. Section 3 focuses on data while section 4 defines the variables used and outlines the models employed. The final section is the discussion, limitations and conclusions.

2. Theory and hypotheses

The study of executive, and in particular CEO, compensation has traditionally fallen within the realms of agency theory in terms of its appropriate level and optimal mix of fixed cash-based salary and variable performance-contingent elements. The evolution of agency theory has led to a division between two distinct strands: normative and positive. The former being rooted in notions of incentive contracts supporting optimal risk-sharing between residual risk-bearing owners and their managerial agents (see Levinthal, 1988 for a full review) where this advocates caution over managerial agents bearing excessive risk that detrimentally influences their decision-making (Holmstrom, 1979, 1987; Shavell, 1979; Fama, 1992; Stiglitz, 1987). The latter positivist perspective is based on empirical evidence in focussing on the separation of ownership from control and the monitoring roles of boards of directors (Fama and Jensen, 1983; Weisbach, 1988; Morck et al, 1989). This advocates the placing of increasing amounts of executive compensation and related executive wealth under risk – through it being tied to performance outcomes of the firm (e.g. Jensen and Murphy, 1990).

Early agency theory is dominated by the simple yet intuitive assumptions of Jensen and Meckling (1976) where agency costs were an outcome from the separation of residual risk bearing ownership from managerial control vested on a central entrepreneur within the firm. Here the differences in utility between new entrants to the firm's organizational structure, namely the minority shareholder owners, and the insider entrepreneur created opportunities for the latter to appropriate percuniary and non-percuniary perquisites at the expense of the outsider principals – disadvantaged by their "distance" from the internal workings of the firm. This separation of ownership from control, which at its core upheld the model of Berle and Means (1932) of ownership diversification being the sole means of how this occurs, rationalized the formation of a board of directors at apex of firm to undertake a monitoring role mitigating moral hazard concerns. It also motivated the use of appropriately designed managerial compensation contracts with these amounting to ex-ante payment of cash-based salary and ex-post performance contingent payment of a variable element of compensation – typically in the form of bonus or stock options. While agency

theory evolved in relaxing the assumption of a central entrepreneur inside the firm in place of the firm being formed from a nexus of contracts between a number of individual distinct owners of factors of production (Fama, 1980; Fama and Jensen, 1983), there has been a consistent focus on ex-ante incentive alignment to mitigate adverse selection and boards of directors to mitigate ex-post moral hazard costs. This in itself has led to further evolutions with human capital theory focussing on the CEO and executives "renting" their managerial human capital to the firm (Fama, 1980; Agarwal, 1981; Harris and Helfat, 1998) and managerial discretion theory focussing on "whether an organization's form and fate sit totally outside the control of its top managers, completely within their control, or, more typically, somewhere in between" (Finkelstein and Boyd, 1998: 180). Compensation is thus a function of the perception of the CEO and executive team best able to achieve success in the designated role (Finkelstein and Boyd, 1998; Sanders and Carpenter, 1998).

A further theoretical evolution from traditional agency is that of behavioural agency theory of Wiseman and Gomez-Mejia (1998) which integrates managerial decision prospect theory (e.g. Kahneman and Tversky, 1979) with agency theory in relaxing rigid assumptions of homogenous risk aversion of managerial agents to include both differing levels of risk-aversion as well as separate loss-aversion in relation to personal wealth. Wiseman and Gomez-Mejia (1998) argue agents risk preferences are "gain-framed" with respect to a notional reference point of current personal wealth with their relative risk-levels associated with decision-making impacted by (1) the allocation of compensation between fixed and variable forms, (2) the design of variable forms of pay – notably stock options, (3) the setting of performance targets in terms of variable pay awards, and (4) the selection of measures used in the evaluation process (Gomez-Mejia and Balkin, 1992).

These agency-based perspectives have led to a plethora of studies focussing on both executive and especially CEO compensation. CEO power theory advanced from early work of Westphal and Zajac (1995) and Zajac and Westphal (1995), based on the demographic similarity in recruitment and evaluation between CEO and board members, focuses on CEO prestige, power and influence over incumbent board members in bargaining increases in compensation (Ryan and Wiggins, 2004). Relationships between levels of monitoring, board structure and CEO

compensation are the focus of Core et al (1999), while mediation of CEO compensation structure and tenure by media and press attention is the focus of Core et al (2008). Finally agency-based human capital theory is applied by Faulkender and Yang (2010) in developing a model of CEO peer review in terms of firm's setting and justifying levels of compensation. Bebchuck et al (2002) proposed managerial power/influence of a dominant CEO over the nomination of non-executive directors and board decisions leads to higher self-rewarding tendencies, while Bertrand and Mullainathan (2001) proposed a "skimming" view on compensation contracting. This view of CEO power can be extended to social networks. For example, Branea and Guedj (2009) show such relationships lead to higher CEO salaries, while an increase in the number of external directorships can provide greater potential for influence over board affairs and decision-making for personal gain (Conyon and Read, 2004). Renneboog and Zhao (2011) extend this argument by suggesting a trade-off between informational benefits that result from these personal networks and external directorships, which enhances managerial discretion and thus salary resulting from the ability to bring information to the firm (Sanders and Carpenter, 1998). Fich and Shivdasani (2006) and Malmendier and Tate (2009) find that firms with strong networks may be managed less well because nonexecutive directors have less time to monitor board activity and the executive director is less focussed. This leads to poor governance and potentially non-optimal compensation contracts. Hallock (1997) and Fich et al (2003) find that CEO's from interlocked firms earn higher monetary compensation than their non-interlocked counterparts. Finally Renneboog and Zhao (2011) find that while CEO pay is higher in firms with stronger networks, the total compensation has a much lower pay-for-performance sensitivity.

The overwhelming majority of literature on executive remuneration is geographically framed on US (e.g. Core et al, 1999, 2008) and UK (Renneboog and Zhao, 2011) with recent extensions to continental Europe and Scandinavia (Oxelheim and Randoy, 2005), Japan (Abe et al, 2005), and China (Buck et al, 2008; Du and Choi, 2010). All studies are theoretically based on agency theory and its close relations such as behavioural agency and human capital/ managerial discretion.

A shortfall of this agency-based literature is in its relating compensation incentives to levels of monitoring, deemed to decrease by the relative "busyness" of directors serving in nonexecutive roles elsewhere, and independence from dominant CEOs or insiders, which is linked to CEO power theory upwardly influencing pay and evaluations. In contrast resource dependence theory (Pffefer and Salancik, 1972) focuses on the board composition and the boundary-spanning roles of directors as being critical resource in securing the survival of firm as well as its performance. This has led to a considerable US-based literature that links the environmental strategies of firms to improvements in performance due to the recruitment of government (Lester et al, 2008; Hillman and Keim, 1995) and politically-linked directors (Hillman, 2005; Holburn and VanDen Bergh, 2008; Hillman and Hitt, 1999; Hillman et al, 1999; Oliver and Holzinger, 2008). However a shortfall here is the lack of any bridge between executive compensation (a core feature of agency theory) and board composition (a central consideration of resource dependency) (Hillman and Dalziel, 2003). One remedy of this theoretical shortfall is the nascent comparative corporate governance literature spawned by Aguilera and Jackson (2003) where an integration of agency and rival institutional perspectives was undertaken. This offers a real possibility to infuse socially under-contextualized agency theory with more context-specific institutional theory.

Institutional theory is based on very different philosophical concepts and is based on agents' limited cognitive notions of reality. In particular, transactions are determined by concepts of bounded rationality and opportunism (Bardhan, 1989; North, 1993). Bounded rationality assumes actions are fundamentally rational and are a function of institutions such as culture, religion, social values and norms (Williamson, 1984). Thus, institutions provide the means of shaping behaviour and transactions and society forms the essential framework upon which all human interactions are based (North, 1993, 1994). In this way the concept of bounded rationality transcends risk preferences, wealth maximization and related loss aversion, as well as informational asymmetry which are at the core of agency theory inasmuch that it assumes these are encapsulated by the institutions shaping intentionally rational behaviour of actors. Institutions themselves evolve through their infusion into national culture and are dependent on the development and interaction

between political and economic markets, with one of the most important institution being the establishment of property right. The nature of the political economy in an amalgam of the judiciary, legislature and executive of a society and these collectively create and enforce formal institutions, the so called "rules of the game" (North, 1990: 3). However, this is only successful if the rules are aligned with the informal institutions (conventions, norms of behaviour) and hence enforcement costs are minimised. This alignment is most easily achieved by competition between organizations in resource-scarce economic environments (North, 1993). The mix between societal norms and the institutional framework determines the incentive structures within society and thus the bargaining power between agents in effecting change. It also strengthens the ability of organizations to adapt and adopt technology as in defining economic rents to innovation and growth opportunities within the society.

The above literature review has exclusively focussed on new institutional economics (NIE) and the closely related transaction cost economics (TCE) with its differentiation between formal and informal institutions. Scott (1995) extended this discussion of institutional frameworks to include three broad concepts: cognitive, normative and regulatory institutions. Cognitive institutions are defined in terms of the "taken for granted" beliefs (Kostova and Zaheer, 1999), which Peng et al (2009) note as being comparable to the NIE's informal institutions. Normative institutions are defined as the commonly accepted informal societal and cultural behaviours, such as norms, goals, values and beliefs (Hillman and Wan, 2005). And regulatory institutions refer to legal statutes and formal rules and regulations to which firms must adhere (DiMaggio and Powell, 1983; Scott, 1995). The latter two are equivalent to NIE's "formal" category (Peng et al (2009). Scott (1995) argues that firms establish legitimacy by operating within the various legal and quasi-legal requirements. This is a view reinforced by Zimmerman and Zeitz (2002) where they argue a failure to acquire regulatory legitimacy is subject to sanctions by the society in terms of withdrawal of the legal right to operate or inhibiting access to resources.

The concept of attaining social and political legitimacy at the expense of concerns over operational efficiency and profitability for organizations is the core of the sociological neo-

institutional perspective advanced by DiMaggio and Powell (1983). DiMaggio and Powell argue organizations come under three distinct pressures for institutional change: *coercive*, *normative* and *mimetic*. DiMaggio and Powell (1983) define *coercive* forces as originating in the power and influence of one organization over another in forcing the adoption of preferred structures and institutions. *Normative* forces "describe the effect of professional standards and the influence of professional communities on organizational characteristics" (Ashworth et al, 2007: 167). *Mimetic* forces arise from one organization mimicking another, which is a manifestation of the tendency to emulate the most desirable or accepted practices or structural choices, even if these have proven to be deficient in effectiveness. Thus while the NIE approach to institutions describes the economic growth opportunities confronting a firm within a given economy, the sociological approach of DiMaggio and Powell (1983) argues the importance of legitimacy in organizational structure over and above pure economic profitability and operational efficiency. We argue that it is through the adoption of a combined institutional approach drawing on both the economics (NIE) and sociological institutional perspectives that a deeper rationalization of firm governance and incentives (executive salary) can be obtained.

Hypotheses

Africa in common with most of the world outside of Europe owes its formal political, governmental and judicial institutions to those *coercively* transplanted during colonization by European metropoles. Those countries not subject to formal colonization adopted formal European-styled institutions owing to considerable *mimetic* pressures, such as those outlined by DiMaggio and Powell (1983) that influenced Japan's adoption of European institutions at the turn of century. However the adoption of European formal institutions is only one element in defining the institutional evolution and path dependent trajectory of institutional development within countries. North (1991) outlines that the interplay between formal transplanted institutions and those of a deeper informal nature upon which they are grafted is critical in determining the broader institutional framework and societal matrix of a given country. Tensions or incompatibility

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between formal and informal institutions is simply deemed to result in political instability (North, 1991). This potential for political instability in itself would call for more control-orientated governance structures of a more patriarchal nature in itself in order to at least partially mitigate resulting instability.

In common with the majority of emerging economies worldwide, African informal institutions are communitarian in nature and rooted on the concept of *Ubuntu*. Whilst Ubuntu is an indigenous South African (Nguni) term (Lutz, 2009; Mangaliso and Damane, 2001; West, 2014), similar terms are vocalized across Sub Saharan Africa in relation to a deeper African philosophy upon which all informal institutions are based (West, 2014; LenkaBula, 2008). Ubuntu has been defined as "…no person is complete in him/herself; she/he is fully human in as far as she/he remains a part of the web of life, including creation and the earth" (LenkaBula, 2008: 378), while a simpler definition is "I am because we are and since we are, therefore I am" (Mbiti quoted in LenkaBula, 2008: 378). Ubuntu is a profound philosophy and underscores traditional religion across Africa, which is outside the realms of conventional religions such as Christianity, Islam and Hinduism, and can be visualized as inextricably binding an individual within society, wider civilization, ecology and the environment and with relationships to ancestors (LenkaBula, 2008).

These deeper philosophical underpinnings shaped African societies in terms of a distinctive communalistic, communitarian model of development with dispute resolution through deference to elders (Davidson, 1992). Furthermore political economies are shaped on feudalistic systems permeated by large extended clan networks that are themselves enforced by strong notions of reciprocity (Bruton et al, 2009). Property rights are secured in terms of social status within clan-based hierarchies. Conceptually economic activity adopts a very different approach to that perceived by Western neoclassical philosophy with communal co-joint ownership of all factors of production and a complete lack of empathy towards Western notions of "separation of ownership from control" (e.g. Jensen and Meckling, 1976), Adam Smith's notion of the "division of labour" (Davidson, 1992) and specialization of economic activity (Davidson, 1992). Furthermore institutional concepts such as the Western definition of corporate form, and associated limited

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liability, accounting standards and financial reporting alongside banks and external organized capital markets are alien to African Ubuntu philosophy (see Kuran, 2009 for a similar discussion on incompatibility of Western institutions with those of traditional Islam). Western notions of "markets" are at best confined to the trading and sale of the final products from economic production. However this obvious incompatibility and incongruity only partially explains the tensions within African society and resulting patriarchal state architecture.

A key characteristic of successful transplantation of foreign institutions into the institutional matrix of an indigenous society is the process of adoption, adaptation and assimilation. This builds on Kuran's (2009) premise of a multifaceted symbiotic and mutually supportive association existing between all institutions within any given societal matrix. In this light the successful replacement of any one or number of indigenous institutions with foreign counterparts is dependent on both the compatibility of implanted institution(s) with the surrounding institutions of indigenous matrix as well as uniformity in their adoption, which directly assists in their successful adaptation and assimilation. African societies were the subject of almost 900 years of Arabian and Atlantic slave trades, where the latter existed for the last 500 years (Davidson, 1992; Nunn, 2007). While formal governance structures were subject to considerable coercive pressure initiating their detrimental institutional development (path trajectory) the resulting governance structures attained both regulatory and over time cognitive legitimacy. This process acted to not only perpetuate the slave trade –ostensibly for external economic benefits – but it served as an impetus to fragment cohesive African nations and states[1]. This in turn has led to observations of the continent having the highest linguistic and ethnic diversity worldwide (Collier and Gunning, 1999) with considerable empirical evidence alluding to ethnic fractionalization inhibiting economic growth (Easterly and Levine, 2003) and resulting in substantially lower national income (Nunn and Puga, 2012).

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[1] An example is the difference between the economic outcomes of Botswana and Sierra Leone, both of which are equally endowed in mineral resources (primarily diamonds). The former was largely unaffected by the slave trade due to natural barriers (the Kalahari desert to the West, the Okavango Delta to the North and West and the settler-based South Africa to the south) while the latter was dominated by the slave trade (Davidson, 1992). Institutional quality of Botswana is on a par with Western Europe while that of Sierra Leone is amongst the lowest in the World (Transparency International, 2013). This difference is also reflected in economic development. Similar comparisons can be made between Tunisia and Morocco and Rwanda and Cote d'Ivoire (BRVM), where the former were unaffected but the latter were impacted by the Arabian and Atlantic slave trades (Davidson, 1992).

The onset of European colonialism in late 1800's resulted in arbitrary national boundaries being drawn with reference to the extent of colonial ambition without any deference to the indigenous African societies that were subsumed or dissected by these boundaries. Thus newly formed colonies contained a myriad of fragmented African societies and ethnic groups within their borders that often had their own culture, language, political, legal and governmental systems. European colonial authorities were necessarily patriarchal in nature to effect control while legal governance architecture in colonies was distinctively bifurcated with indigenous African disputes resolved in indigenous courts (*indigenat* in former French colonies) while European disputes and issues were settled in elements of legal systems prevalent in European colonial metropole transplanted to the colony (Joireman, 2001). Independence for the majority of African nations merely inferred the transition from imperial to local "colonial" control with this vested in select ethnic groups who formed the backbone of newly formed national social elites (North, 1989). The almost wholesale disbandment of African indigenous courts in favour of their European counterparts at independence caused further consternation through the effective further disenfranchisement of large swathes of an already ethnically fragmented society[2]. The impact of independence was thus twofold. Firstly it formed social elites who had a vested interest in maintaining their considerable private benefits of control at the expense of more equitable reallocation of resources which goes hand-in-hand with institutional reform. Secondly it rendered the disempowerment of large swathes of already fractionalized societies while empowering extremely narrow sets of formal political, governmental and legal institutions whose minimal constituency contributed to their almost wholesale lack of cognitive legitimacy in eyes of population.

However a condition for firms operating in such environments is through their attenuation of regulatory legitimacy. Regulatory legitimacy enables firms to avoid sanction and to enjoy the tacit

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[2] It is important to note that this bifurcation remained intact despite the disbandment of African indigenous courts. The maintenance of traditional power structures side-by-side with the formal governmental, political and legal apparatus is visible in modern nations such as Ghana where Ashanti royal courts in Kumasi (Ghana's second city) retain considerable cognitive and even regulatory legitimacy with populous while this is largely lacking from the patriarchal European-transplanted formal seat of government and law courts in Accra – the official capital.

support of regulators and authorities. A visible means of achieving such legitimacy is through mimetic isomorphism where firms actively recruit and retain directors drawn from social elite backgrounds. A further nuance of the preferential recruitment of such directors is through the firm's ability to socially dis-embed itself from the deeper reciprocity expectations arising from the extended clan-based nature of indigenous African society. This way African entrepreneurs and owner-managers can secede from the deep-rooted commitments of extended African society without losing cognitive legitimacy. However while these explanations support the recruitment and retention of social elites to the board, we argue that their bounded rationality infers their association with higher executive salaries. Thus we test the following hypothesis:

Hypothesis 1: Average executive cash-based salary in IPO firms is positively associated with the ratio of nonexecutives drawn from social elite backgrounds

The mediation of the postulated relationship between social elites on board and average executive salary adopts two rival explanations: the first drawing on agency theory while the second draws upon its institutional counterpart.

The agency view is adopted by Doidge et al (2007) in arguing that improving institutional quality –in terms of decreasing search and verification costs for minority investors decreases insiders propensity to expropriate through rendering the technologies used to appropriate ever more costly. Increasing costs of appropriation of economic rents from the firm caused through elevated institutional quality infers insiders motivations are more likely to shift towards reinvestment of earnings, as opposed to their appropriation, so as to enhance the cost of capital of the firm overall (Doidge et al, 2007). In this light insider tendencies to self-reward and thus award themselves higher cash-based salaries is likely to decrease with increasing institutional quality where minority investors are empowered through being more aware of potential appropriation, better equipped in being able to measure and prove occurrences as well as to prosecute deviations from optimal behaviour through impartial legal courts.

The institutional perspective yields a very different rationalization of the mediation of institutional quality between the relationship of average executive salary and board participation of social elites. This focuses on higher institutional quality being representative of a very different institutional structure and societal matrix from that in nations with low institutional quality. As such the long term detrimental path dependence trajectory of institutional development that leads to the promotion of social elites in often extremely narrow political economies dominated by these elites gives way to demographically flatter political economies with broader constituency and more inclusive formal governmental, political and legal institutions in regimes of high institutional quality. Consequently in regimes of high institutional quality there is less necessity for the recruitment and retention of social elites on boards given the lower importance for seeking regulatory and to a lesser extent cognitive legitimacy for the firm. The decreased need for social elites on board intrinsically alters the social influences within the firm – expressed through the bounded rationality of directors – with less emphasis on expropriation through self-reward tendencies. Thus institutional quality is perceived as a reflection of the underlying shape and scope of political economy and national polity – with lower institutional quality inferring this is dominated by social elites and their associated high private benefits of control, while higher institutional quality is reflective of a flatter, more equitable distribution of power, control and resources across an economy and thus less necessity for social elites. The lower proportions of social elites alongside the firm operating in a more equitable polity and political economy infuses more ethical values into executives in terms of their propensity to appropriate economic rents from firm through salary self-reward. Thus we test the following hypothesis:

Hypothesis 2: The association between average executive cash-based salary in IPO firms and proportions of social elite nonexecutives on board is negatively mediated by institutional quality

3. Data

3.1 Data: Sample selection

The dataset construction is in two stages. First, a list of Initial Primary Offerings (IPOs) on African markets between January 2000 and January 2014 was constructed. In North Africa these include Algeria, Egypt, Morocco and Tunisia, and in SSA Cape Verde Islands (Bolsa de Valores de Cabo Verde), Cameroon (Bourse de Douala), BRVM (Cote d'Ivoire), Sierra Leone, Malawi, Kenya, Uganda, Rwanda, Tanzania, Seychelles, Zambia, Namibia, Botswana, Mozambique, Mauritius and Ghana. Nigeria was also included but on data between January 2002 and January 2014 were available. The primary source was the national stock exchanges and their associated websites and these were cross checked with lists sourced from major brokerage houses to ensure accuracy in the case of Nigeria and Zambia. The three listings on the Algerian exchange were during the initial period following inception between 1998 and 2000 and have also been included. This resulted in 280 listings in total.

Secondly, the IPO prospectuses were obtained. These are IPO's or offerings with genuine diversification of ownership amongst a base of minority shareholders as opposed to private placements involving the preferential allocation of stock with institutional or corporate block holders in pre-arranged quantities and prices. Equally care was taken to avoid misclassifications with registrations, introductions and seasoned (secondary) offerings as these are often also officially referred to as IPOs. Furthermore IPO's are defined as listings of ordinary shares with single class voting rights, that is, excluding preferred stock, convertibles, unit and investment trusts as well as readmissions, reorganizations and demergers and transfers of listings between main and development boards. They were collected from the financial market regulator websites for Algeria and Morocco while a combination of Thomson Corporation Perfect Information and Al Zawya databases were used for Egyptian prospectuses. The Al Zawya database, the national stock exchange and direct contact with individual firms, were used to source prospectuses for Tunisia. Similarly in SSA prospectuses were from the Ghanaian, Tanzanian, Cape Verdean, and Sierra Leone national stock exchanges and the exchange websites in the case of Seychelles and Cameroon. Thomson Corporation Perfect Information database was used in the first instance to source prospectuses from Nigeria, Malawi and Kenya. Pangea Stockbrokers (Zambia) as well as

individual floated firms provided prospectuses for the Zambian stock market. Finally, in SSA, the African Financials website (African Financials website, 2014) provided information relevant to listing from annual reports. This resulted in a sample of 202 IPOs across all of Africa in total. However given the focus of this study is on private sector firms at IPO then a further necessity is the removal of state privatization entities and joint-ventures or affiliates with foreign partners. This resulted in a final sample size of 136 IPOs which is comprised of 1 IPO firm from Cape Verde Islands, Algeria, Sierra Leone, Malawi and Zambia respectively, 3 from Mauritius, 4 from BRVM (Cote d'Ivoire), 6 from Botswana, 10 from Ghana, 5 from Kenya, 2 from Namibia and Tanzania respectively, 24 from Nigeria, 5 from South Africa, 7 from Egypt, 35 from Morocco and finally 28 from Tunisia. It is worth noting that the seemingly very low populations of IPOs in the two largest markets in Africa, namely Egypt and South Africa are a reflection of liquidity concerns that drives issuing firms to list with private placements, introductions or registrations. This underscores the importance of obtaining the individual firm listings prospectuses prior to subsequent analysis as a critical check on whether listing is a genuine IPO. Furthermore it is worth noting that IPOs in Egypt are routinely in conjunction with an associated private placement.

Considerable care was taken in the interpretation of information from IPO listings prospectuses given the considerable variation in size and quality of these filings across the continent. Attempts to verify data from prospectuses with additional sources such as firm websites, annual reports and mandatory filings of annual accounts were taken where possible. US$ Exchanges rates were from Bloomberg.

4 Empirical Methods

4.1 Variables

Dependent variable

We use the natural logarithm of average executive cash-based salary as our dependent variable. This is formed from the total cash-based salary attributable to all board executives divided by total number of executives with this ratio converted to its natural logarithm following Core et al (1999)

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in order to correct for heteroskedasticity. The cash-based salaries attributable to executive directors are sourced direct from IPO listings prospectuses as is the count of the number of executives present. Further checking of salary values was undertaken through annual reports, obtained from AfricanFinancials[3] website to ensure integrity in values and reporting. It should be noted that where executives are paid sitting fees in lieu of board meetings (known as "*jetons de presence*" in Francophone countries) in addition to their fixed base remuneration that this is also taken into account in their total cash-based salary or compensation for the year.

Explanatory variables

We use a proportion of social elites to board size variable to account for the ratio of nonexecutive directors drawn from social elite backgrounds to total number of directors. Social elites are defined from definitions contained within director profiles in individual firm IPO listing prospectuses. Definitions are constrained by four elites isolated from firm listings prospectuses with these being those from senior military, governmental, commercial and university backgrounds. While we concede that there is a risk of individual directors having backgrounds rooted in a number of different social elites we are constrained to those reported formally in the listings prospectuses. Thus our data is representative of that formally reported by firms adhering to national regulatory requirements. Military elites are defined as positions from admiral, general, brigadier, group captain and above in national army, air force, navy. Governmental elites include senior civil service appointments, roles of former president, prime minister, diplomatic and ambassadorial roles. Commercial backgrounds are defined as prestigious blue-chip directorships, commercial attaché roles, board level roles in national chambers of commerce. University elite backgrounds are defined as professor and above. Our aggregate social elites construct is formed from the combination of all elites to board size. This aggregate elites variable forms the measurement basis

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[3] The AfricanFinancials website (www.africanfinancials.com) lists individual firm-level annual reports per country and year categories for the majority of African stock markets. It should be noted that some records are incomplete inferring that this source is used in a more supportive context to our main database of IPO listings prospectuses.

of our *Hypothesis 1*. We also disaggregate these into their four component elites, namely military, governmental, commercial and university in their specific relation to board size.

Mediation variables

We employ one institutionally-based measure, in conjunction with the proportion of social elites to board size, to form our mediating variables. This is an aggregate institutional quality measure, formed from equally weighted average of six World Bank governance metrics (Kaufman *et al.*, 2009) that themselves have been rebased to a $0 - 10$ scale (see Liu *et al.*, 2014 for details of institutional mediation using an index). The interactive institutional quality relates to *Hypothesis 2*.

Control Variables

We incorporated a number of distinct sets of control variables. The first were *institutional control variables* with this being the aggregate institutional quality index, comprised from equally weighted average of six underlying World Governance metrics. The inclusion of these is necessitated through our interactive analysis using the methodology of Kim et al., (2004) and Liu *et al.*, (2014).

A group of *board control variables* is necessitated both through executive decision monitoring and control (Fama & Jensen, 1983) as well as a resource dependence need for securing access to information and resources to ensure the survival of firm (Boyd, 1994; Pfeffer & Salancik, 1978). Thus we include controls for board size, in terms of total number of executive and nonexecutive directors, an outsider nonexecutive ratio, defined as number of outside, independent and unaffiliated nonexecutives to board size. To account for executive entrenchment and consequent change in risk preferences in decision-making and reward tendencies we include the natural logarithm of average executive tenure, with executive tenure being denominated in years and obtained from individual firm prospectuses. Finally to account for IPO firms that are constituent to extended business groups (see Khanna and Rivkin, 2001 and Khanna and Yafeh, 2007 for full review) where a distinctive feature is the control exerted over constituent firms by "soft" measures such as director interlock and shared board members, we include a ratio of business

group affiliated directors to total board size. This is in line with recent evidence regarding the proliferation of business groups across both Sub Saharan Africa (Hearn and Piesse, 2013) and North Africa (Hearn, 2014). The identification of business groups (both family and non-family) requires extensive additional analysis of listings prospectuses themselves as well as local indigenous media, and consultation with local sources such as stock exchange personnel and brokers across Africa.

In terms of *firm controls* and in line with Sanders & Carpenter (1998) and Finkelstein & Boyd (1998) we use the natural logarithm of firm's pre-tax revenues (or sales) as proxy for size. This is representative of the complexity of a given firm's operations and thus mirrors complexity of task environment which in turn is reflective of information processing requirements of the board. We adopt the accounting return on assets (ROA)[4] as a measure of firm performance in line with Finkelstein & Boyd (1998) and Khanna & Palepu (2000). We also control for firm age where older firms are anticipated to have larger, more complex operations mirroring more complex task environments. This also controls for the "liability of newness" and the considerable information asymmetries generated by a lack of operational and performance history (Arthurs *et al*., 2008). Finally in line with Bruton et al (2010) we include a financial leverage or gearing control in the form of ratio of debt to total assets[5]. This captures the differential use of debt as a governance mechanism as well as the degree and type of financing corresponding to where the firm is positioned in its lifecycle of development. This is also included given the institutionalized religious prohibition of interest-based debt instruments, which is prevalent in Islamic shari'ya informal institutions (Kuran, 2004) that typically infuse into familial values and into firm's organizational and the impact of this on financial structure and gearing (leverage).

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[4] ROA is conventionally defined as ROA = ((Net Income + Interest*(1 − Tax Rate))/ Total Assets) (see Khanna & Palepu, 2000). However due to significant variation in the data arising from varying reporting standards across Africa with frequent omission of reported interest income and corporate taxation rates from listings prospectuses we use a modified version of this, namely ROA = (Net Income/ Total Assets). However while both measures suffer from business cycle affects and are not forward looking they provide a representative indication of firm performance subject to the data limitations prevalent to emerging economies.

[5] It should be noted that the ratio of debt to total assets is vulnerable to variations between the static accounting valuation of equity as opposed to market-valuation and is vulnerable to business cycles it captures both the preferences for the use of debt, and importantly captures the degree debt is used in conjunction with it being a "rules-based" governance instrument limiting managerial discretion and mitigating potential agency conflicts.

We introduce an *IPO control* to account for the demand for equity finance in terms of the relative importance of issue size to the total number of issued and outstanding shares.

We introduce two *ownership control* to account for concentrated cash-flow ownership holdings of business angels (BAs), venture capitalists (VCs), aggregate board, corporate block entities and family. These represent the mechanism by which these entities can exert significant coercive institutional pressures into the firm's organizational structure (DiMaggio & Powell, 1983).

Finally we introduce an *economic control* in the form of natural logarithm of GDP per capita. This is representative of the aggregate wealth across society which is important given the considerable differences in GDP across a heterogeneous sample such as that within Africa.

4.2 Empirical Model

Estimation is undertaken by pooled ordinary least squares (OLS) to test the two exploratory hypotheses. Two distinct classes of model are developed. Both use dependent variable (DV) of natural logarithm of average executive cash-based salary.

The first set of models explicitly tests the two hypotheses through including ratio of social elites to board size as explanatory variable alongside the product of this with aggregate institutional quality as mediating variable. These are on top of all controls outlined in preceding sections. industry and time (year) fixed effects are applied across all models. Industry controls are necessary in a cross country study where Sanders and Carpenter (1998) argue different industries are subject to different levels of regulation and capital intensity while year effects relate to variation in institutional development and improvements in regulations, capital market culture, and surveillance environment. The industry definitions vary across each country (see Khanna & Rivkin, 2001 for details of similar issues in a comparable study of 14 emerging economies) leading us to adopt Bloomberg basic industry definitions – which equate to 2-digit SIC classifications[6]. Our OLS regression model is:

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[6] Industry classifications are: Basic Materials; Consumer Goods Non-Cyclical; Consumer Goods Cyclical; Energy; Financials; Health; Industrials; Technology; Telecommunications; Utilities. The identification of firms according to

$$
\begin{aligned}
Log(Average\ Executive\ Salary) = {} & \alpha + \beta_1 Mediating\ Variables_t \\
& + \beta_2 Explanatory\ Variables_t + \beta_3 Institutional\ controls \\
& + \beta_4 Board\ controls_{i,t-1} + \beta_5 Firm\ specific\ controls_{i,t-1} \\
& + \beta_6 Ownership\ controls_{i,t-1} + \beta_7 IPO\ controls_{i,t-1} \\
& + \beta_8 Economic\ controls_{i,t-1} \\
& + Industry\ F.E. + Time\ F.E. + \varepsilon_{i,t}
\end{aligned} \quad (1)
$$

where t designates time at IPO, t-1 denotes year preceding IPO event and i denotes individual firm level values. F.E. denotes fixed effects. All other controls are as defined in preceding section. Finally we form a model where only those variables within the interactions that are statistical significant are retained.

In the second set of models we explore the individual interactive effects arising from each of the six World Bank governance metrics on the association between the ratio of social elites to board size to the natural logarithm of average executive salary. This is on top of all controls outlined previously and each of the six disaggregated World Bank metrics together with an aggregate of the other five institutional quality metrics not included in the model – so as to mitigate concerns of omitted variable bias distorting results. This way we study the association between each of the individual institutional quality dimensions with natural logarithm of average individual executive salary. Our OLS regression model is:

$$
\begin{aligned}
Log(Average\ Executive\ Salary) = {} & \alpha + \beta_1 Mediating\ Variables_t \\
& + \beta_2 Explanatory\ Variables_t + \beta_3 Institutional\ dimension_t \\
& + \beta_4 Institutional\ controls + \beta_5 Board\ controls_{i,t-1} \\
& + \beta_6 Firm\ controls_{i,t-1} + \beta_7 Ownership\ controls_{i,t-1} \\
& + \beta_8 IPO\ controls_{i,t-1} + \beta_9 Economic\ controls_{i,t-1} \\
& + Industry\ F.E. + Time\ F.E. + \varepsilon_{i,t}
\end{aligned} \quad (2)
$$

where t designates time at IPO, t-1 denotes year preceding IPO event and i denotes individual firm level values. All variables are as defined previously in expression (1).

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their industry using broad Bloomberg definitions is in keeping with data limitations across our sample, which is a prevalent characteristic of emerging economies.

5. Results

5.1. Descriptive statistics and correlation analysis

The evidence in Table 1 reveals that the proportion of sample missing is extremely low inferring that our compilation of individual firm-level executive's salary is comprehensive and representative of the wider sample. It is notable that there is considerable variation of average executive cash-based salary around the mean average executive salary of US$ 141,291.01 for the wider continent. This ranges from a minimum of US$ 9,441.78 in Sierra Leone to the largest value of US$ 1,224,000 in Algeria's single private sector IPO, which is itself attributable to a single executive, the CEO, with the firm being a core constituent to larger family-centred business group. More generally it is notable that the majority of IPO firms tend to be concentrated in North African markets of Morocco and Tunisia as well as West Africa's Nigeria and Ghana. This is due to a broad range of extensive corporate tax breaks encouraging listings in order to sustain national markets in Morocco, Tunisia and Cape Verde as well as considerable indirect political influence in Nigeria and to a lesser extent, Ghana.

Examination of average firm-level ratios of social elites across markets reveals distinct concentration of social elites in English common law countries with minimal ratios of social elites present in French and Portuguese civil code counterparts. This is largely reflective of the very different economic governance on a macro scale between civil code law and common law countries with the latter notably adhering to dirigiste tradition and the latter leaning towards market-orientated governance systems. The dirigiste system is focussed on extensive state-participation and architecture engendering control over product and factor markets as well as regulation which permeates its control throughout the wider economy – such as labour and capital markets. Upon disaggregation and further visible differences can be seen where all four categories of social elites are not common in North Africa. Military elites have a small but significant presence in West African states of Nigeria and Ghana – reflecting the relatively recent transition from military authoritarian rule to democracy in both countries. Government elites tend to be concentrated across East Africa, Nigeria and Sierra Leone and across Southern Africa with particularly high

concentrations in Zambia, Namibia, Botswana and Malawi. University elites are focussed only in West Africa and in particular in Ghana and Nigeria while there is a proliferation of commercial elites in Kenya and Mauritius as well as more generally across West Africa and to a much lesser extent across North Africa too.

Finally there is considerable variation in aggregate institutional quality from the continental mean of 46.78% with this varying from 71.55% in Mauritius and 69.09% in Botswana to 29.86% in Nigeria, 34.24% in Algeria and 38.56% in Sierra Leone. More generally institutional quality is higher across the Southern African and North African regions while it is lower across East and West African regions.

Table 1

The evidence from Table 2 reveals considerable concentrations in the types of firms undertaking IPO across the continent. Firstly while there is a relatively even dispersion of entrepreneurial firms retaining their founders as CEO, these tend to be family firms with family business group constituents being especially common. Non-family affiliated founder-CEOs are less frequently observed with these tending to be more concentrated in West and Southern Africa while their family-affiliated counterparts are prevalent in North and East Africa. The East African concentration being focussed on Mauritius which is in line to similar findings by Hearn and Piesse (2013) regarding dominance of business groups in Mauritian economy. More generally there is a strong concentration in both nuclear family and extended family business group constituent IPO firms in West and North Africa (see Hearn, 2014 for discussion of family business groups in North Africa). Malawi's sole IPO firm is notable in being constituent to the Press Trust business group which is tied to the presidency (Hearn and Piesse, 2013) while the high proportion of non-family business group participation in IPOs in BRVM (Cote d'Ivoire) is due to the involvement of Bank of Africa group[7] (Hearn, 2014).

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[7] Bank of Africa group is notable in having transitioned from being a non-family business group to that of a family when it was taken over by Morocco's Benjelloun family in late 2008. However the original structure and key personnel

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There is an equally geographically focussed association with each of the five categories of cash-flow ownership. Levels of business angels retained ownership follows the wealth of the market – as outlined in GDP per capita values from Table 1. However two prominent exceptions are Egypt and Nigeria where both have large diversified economies but equally large income inequalities. Venture capitalist retained ownership is more broadly dispersed across the continent although both this and business angel ownership are minimal in size compared to the levels of ownership by insider boards, corporate block entities and family. Corporate block ownership is largely concentrated in East, West and Southern Africa while that of family is focussed on North Africa. The only exceptions being the high family ownership in Mauritius and West African countries of Nigeria, BRVM and Ghana.

Table 2

Evidence from study of correlations, in Table 3 reveals these are generally small in absolute size and generally lacking in statistical significance. Those correlations that are statistically significant tend to be of low value inferring minimal co-variation in movements. It should be noted that a prominent exception is the very high correlation between all size of World Bank governance metrics that are also statistically significant ($p \leq 0.01$). This motivates our recursive inclusion and focus on each measure in turn and prohibits any joint-inclusion. More generally this evidence mitigates concerns regarding multicollinearity.

Table 3

5.2 Empirical results

The empirical evidence from Table 4 (model 1) reveal a large positive (+15.808) between ratio of social elites on board and natural logarithm of average executive cash-based salary (our dependent variable or DV) ($p \leq 0.01$). This supports our maintenance of *Hypothesis 1*. This association is

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were maintained for some time following takeover thereby leading us to classify the 4 Bank of Africa entities listed as being constituent to a non-family business group (Hearn, 2014).

negatively mediated (-34.155) by institutional quality ($p \leq 0.01$). This supports our maintenance of *Hypothesis 2*.

In terms of controls and elevated average executive cash-based salary is associated with smaller board size ($p \leq 0.10$), larger revenues ($p \leq 0.01$) indicating greater complexity in operations, higher performance (ROA) ($p \leq 0.10$) and younger firms ($p \leq 0.10$). The dependent variable is also associated with much lower proportions of shares offered at IPO to the total issued shares of the firm ($p \leq 0.10$), lower business angel retained ownership ($p \leq 0.01$) and higher venture capitalist retained ownership ($p \leq 0.05$). The adjusted R^2 (in model 1) is 53.59% while the sum of the squared errors (SSE) is 187.47.

We undertake further study into the four disaggregated component social elites, namely military, governmental, commercial and university, where these are added individually into regression model explaining dependent variable (model 2) and then with each mediated by institutional quality (in model 3). Some features from the results from both models are notable. The first is the large positive (+8.986) association ($p \leq 0.05$) between ratio of military social elites and average executive salary in model 2, while the other three ratios of social elites associations lack statistical significance at any discernable confidence level. The importance of ratio of military social elites in association with average executive salary is further supported in model 3 where it, alongside the association of governmental social elites are positively associated with dependent variable ($p \leq 0.05$). These are both negatively mediated by institutional quality. Associations between all controls and dependent variable are similar in size, direction and statistical significance to those reported earlier in model 1.

Finally it is notable that inclusion of each of the four disaggregated social elite ratios and their institutionally mediated counterparts (model 3) infers a SSE of 182.56 which is markedly lower than that for the aggregated social elites ratio (and its institutionally mediated counterpart) in model 1 (187.47) while it is also substantially lower than the underlying model 2 (SSE of 197.61). However models 2 and 3 are equally notable for having similar explanatory power (adjusted R^2) while associations between two of social elites ratios and dependent variables persistently lack

statistical significance – namely with commercial and university elites. As such we construct a final model (model 4) including only those two social elite ratios that attain statistical significance in prior models – namely military and governmental. Model 4 reports these results where ratios of both military and governmental elites are large and positive (+20.563 (p ≤ 0.05) and +11.773 (p ≤ 0.05) respectively) while these are both negatively mediated by institutional quality (-27.792 and -26.320 (p ≤ 0.05) respectively). It is notable that the institutional mediation of military elites ratio in model 4 lacks statistical significance. However our final model 4 contains the disaggregated social elites ratios that are statistically significant, while SSE is only marginally above that for model 3 where all social elites were jointly included in model and where adjusted R^2 is higher than in either of the two preceding models 2 or 3. Thus we argue our model 4 is the model of "best fit" in terms of its explanatory power of average executive cash-based salary in terms of containing only those explanatory variables of statistical significance.

Table 4

The results from our final exercise in studying the institutional mediation impact on relationship between the four disaggregated ratios of social elites on board with average executive salary are outlined in Table 5. Here we use each of the six individual World Bank governance metrics recursively in turn – where these are represented by dimensions 1 to 6. Our findings indicate that two institutional dimensions significantly mediate the association between social elites and dependent variable. These are *corruption control* and *democratic voice and accountability* where the adjusted R^2 (50.50% and 51.51% respectively) arising their specific inclusion is substantially higher than when aggregate institutional quality (comprised of all six metric aggregated) is used (model 3 of preceding Table 4). Furthermore the SSE's (177.73 and 174.08 respectively) associated with both institutional dimensions (1 and 2) are minimal compared to the other four institutional dimensions. More generally the ratios of military and governmental elites retain their statistical significance across all six models with the sole exception upon the addition of the sixth institutional dimension – where a very large size positive association between dependent variable

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and university elites is attained (+48.284) which is negatively mediated by *democratic voice and accountability* (dimension six) (-108.407). Associations with all other controls are similar to those for mediation with aggregated institutional quality.

Table 5

6. Conclusions

6.1 Discussion and Summary

This study examined the impact of board members drawn from social elites on average executive cash-based fixed salary in 136 private sector IPO firms listed on a sample of African stock markets between January 2000 and January 2014. We further extend our study by disaggregating generic social elites into four constituent categories, namely military, commercial, governmental and university while also disaggregating generic institutional quality into its six constituent World Bank metrics.

Our findings indicate that boards formed with greater proportions of social elite nonexecutives are associated with higher average executive cash-based fixed salaries. This association is negatively mediated by institutional quality. Upon disaggregation of social elites and the evidence suggests that military and governmental elites presence on boards are statistically significantly associated with elevated executive salary while both associations are negatively mediated by institutional quality. Further disaggregation of institutional quality into its six constituent World Bank institutional metrics reveals that state-level corruption control and enhanced democratic voice and accountability measures are particularly strong in their mediating effect of the association between board social elites and average executive salary.

These results indicate a contribution to institutional theory inasmuch that the recruitment and retention of social elites to the board is necessitated by the political economy and polity within which the firm is inextricably socially embedded. Those political economies dominated by social elites – reflected in weaker institutional quality – are more likely to impact firms through their seeking regulatory legitimacy attained by the recruitment of social elite board members. These in

turn shape executive salary incentives through their infusing their values onto the board via the bounded rationality of directors. The opposite is true of high institutional quality where this is reflective of a much demographically flatter political economy with greater constituency where notions of private benefits of control are less likely to infuse into individual firm's boards via bounded rationality. Equally higher institutional quality infers less necessity of recruitment of social elites given the lower transactions costs within society and thus lower need for social elites connectivity to alleviate these. Institutional theory bridges this gap and provides a useful link into the historical evolution and structure of national political economies.

6.2 Limitations

The principal limitations are the exclusive focus on IPOs and the small sample size. While the focus on IPOs acts as a distinctive contribution in terms of director compensation studies focussing on IPO firms, a useful extension of this work would be to broaden the sample to include all listed entities in Africa and not just private sector firms. However, a significant remaining obstacle to any widening of the study is access to data and the substantial variation in the quality of archival collections of annual reports, filings and listings prospectuses across the continent.

6.3 Managerial relevance

This study examined the impact on average director compensation arising from distinctive board composition patterns in respect of four categories of social elites, namely military, governmental, commercial and university in a multi-country sample of African private sector IPOs. The findings reveal substantial support for the premise that social and political legitimacy is of paramount importance over and above operational efficiency and profitability in emerging economies that are characterised by considerable environmental uncertainty. IPO firms seek to internalize liabilities associated with the structure of the indigenous political economy through preferential recruitment of dominant categories of social elites. In many emerging countries social elites control the economic rent and growth opportunities and also influence the institutional framework that dictates

institutional quality. In the absence of active capital and managerial labour markets, or where these lack institutional support, military and governmental elites in particular enable the firm to attain significant regulatory legitimacy while they possess both explicit bargaining power within firms regarding salary as well as implicit infusion of social values associated with wider political economy through their bounded rationality exhibited in decision-making regarding salary levels.

5.4 Conclusions

Using pooled data analysis techniques we examined the impact on average executive cash-based salary arising from boards staffed with social elites in a comprehensive sample of African IPO firms. We found a positive relationship between higher proportions of social elites on IPO firm boards and executive salary while this relationship was negatively moderated in high institutional quality environments in contrast to their low institutional quality counterparts. Furthermore we found this association to be particularly robust with military and governmental elites while institutional mediation is particularly strong with respect to enhanced corruption control and democratic voice and accountability components. These findings underscore the inseparability of social elites and institutional quality. Thus owing to a combination of both social legitimacy and economic rent-seeking opportunities for the focal firm, the selective recruitment of social elites to the board reflects the typology of the underlying political economy within which the firm is socially embedded. This is an important consideration that is often overlooked in emerging economy research.

References

Abe, N., Gaston, N., & Kubo, K., (2005). Executive pay in Japan: the role of bank-appointed monitors and the main bank relationship. *Japan and the World Economy*, 17, 371 – 394

African Financial website. (2014). African Financial Statements and Annual Reports. http://www.africanfinancials.com/ Accessed 15 September 2014

Agarwal, N. C. (1981). Determinants of executive compensation. *Industrial Relations*, 20(1), 36-46

Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *The Academy of Management Review*, 28(3), 447-465

Arthurs, J., Hoskisson, R., Busenitz, L., & Johnson, R. (2008). Managerial agents watching other agents: multiple agency conflicts regarding underpricing in IPO firms. *Academy of Management Journal*, 51, 277–294

Ashworth, R., Boyne, G., & Delbridge, R. (2007). Escape from the Iron Cage? Organizational change and isomorphic pressures in the Public sector. *Journal of Public Administration, Research and Theory*, 19, 165-187

Baker, G. P., Jensen, M. C., & Murphy, K. J. (1988). Compensation and incentives: Practice vs. Theory. *The Journal of Finance*, 43, 593-617

Bardhan, P. (1989). The new institutional economics and development theory: a brief critical assessment. *World Development*, 17(9), 1389-1395

Beatty, R. P. & Zajac, E. J. (1994). Managerial incentives, monitoring and risk bearing: A study of executive compensation, ownership, and board structure in Initial Public Offerings. *Administrative Science Quarterly*, 39(2), 313-335

Bebchuck, L. A., Fried, J. M., & Walker, D. I. (2002). Managerial power and rent extraction in the design of executive compensation. *University of Chicago Law Review*, 69, 51-846

Berle, A., & Means, G. G. 1932. *The Modern Corporation and Private Property Transaction*. Publishers: United States. ISBN: 0-88738-887-6

Boyd, B. K. (1994). Board control and CEO compensation. *Strategic Management Journal*, 15(5), 335-344

Branea., A. & Guedj, I. (2009). Director Networks. EFA 2007 Ljubljana Meetings Paper, University of Texas at Austin

Brav, A., & Gompers, P. (2003). The role of lock-ups in initial primary offerings. *Review of Financial Studies*, 16, 1-29

Bruton, G. D., Filatotchev, I., Chahine, S., & Wright, M. (2010). Governance, ownership structure, and performance of IPO firms: the impact of different types of private equity investors and institutional environments. *Strategic Management Journal*, 31, 491-509

Buck, T., Liu, X., & Skovoroda, R. (2008). Top executive pay and firm performance in China. *Journal of International Business Studies*, 39(5), 833-850

Collier, P. & Gunning, J. W. (1999). Why has Africa grown slowly? *Journal of Economic Perspectives*, 13(3), 3–22.

Conyon, M., & Read, L. (2004). A model of the supply of executives for outside directorships. *Journal of Corporate Finance*, 12, 645-659

Core, J.E., Holthausen, R.W., & Larcker, D.F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51, 371-406

Core, J. E., Guay, W., & Larcker, D. F. (2008). The power of the pen and executive compensation. *Journal of Financial Economics*, 88, 1-25

Davidson, B. (1992). *The black man's burden: Africa and the curse of the nation-state*. James Currey publishers: Woodbridge, Suffolk. UK

DiMaggio, P., & Powell, W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160

Doidge, C., Karolyi, A., & Stulz, R. (2007) Why do countries matter so much for corporate governance? Journal of Financial Economics, 86, 1-39

Du, J., & Choi, J. N. (2010). Pay for performance in emerging markets: Insights from China. *Journal of International Business Studies*, 41, 671–689

Easterly, W. & Levine, R. (1997). Africa's growth tragedy: politics and ethnic divisions. *Quarterly Journal of Economics*, 112(4), 1203–1250

Easterly, W., & Levine, R. (2003). Tropics, Germs, and Crops: The Role of Endowments in Economic Development. *Journal of Monetary Economics*, 50(1), 3-39

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88, 288-306

Fama, E. F. (1992). Time, salary, and incentive payoffs in labour contracts. Unpublished working paper, University of Chicago.

Fama, E. F. & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325

Faulkender, M., & Yang, J. (2010). Inside the black box: the role and composition of compensation peer groups. *Journal of Financial Economics*, 96, 257-270

Fich, E., & White, L. J. (2003). CEO compensation and turnover: the effect of mutually interlocked boards. *Wake Forest Law Review*, 38, 935-959

Fich, E., & Shivdansani, A. (2006). Are busy boards effective monitors? *Journal of Finance*, 61, 689-724

Finkelstein, S., & Boyd, B.K. (1998). How much does the CEO matter? The role of managerial discretion in the setting of CEO compensation. *Academy of Management Journal*, 41, 179-199

Gomez-Mejia, L., & Balkin, D. B. (1992). Compensation, organizational strategy and firm performance. Cincinnati: South western

Hallock, K. (1997). Reciprocal interlocking boards of directors and executive compensation. *Journal of Financial and Quantitative Analysis*, 32, 331-344

Harris, D. & Helfat, C. (1997). Specificity of CEO human capital and compensation. *Strategic Management Journal*, 18, 895–920

Hearn, B., & Piesse, J. (2013). Firm level governance and institutional determinants of liquidity: evidence from Sub Saharan Africa. *International Review of Financial Analysis*, 28, 93-111

Hearn, B. (2014). The political institutional and firm governance determinants of liquidity: Evidence from North Africa and the Arab Spring. *Journal of International Financial Markets, Institutions & Money*, 31, 127-158

Hearn, B. (2014). The liquidity-cost implications from the attraction of regional primary listings: Evidence from West Africa. *Research in International Business and Finance*, 30(1): 91-110

Hillman, A., & Keim, G. (1995). International variation in the business-government interface: institutional and organizational considerations. *Academy of Management Review*, 20(1), 193-214

Hillman, A. J., Zardkoohi, A., & Bierman, L. (1999). Corporate political strategies and firm performance: Indications of firm-specific benefits from personal service in the US government. *Strategic Management Journal*, 20(1), 67-81

Hillman, A. J., & Dalziel, T. (2003). Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *Academy of Management Review*, 28(3), 383-396

Hillman, A. J., & Wan, W. P. (2005). The determinants of MNE subsidiaries' political strategies: Evidence of institutional duality. *Journal of International Business Studies*, 36, 322-340

Hillman, A. J. (2005). Politicians on the board of directors: do connections affect the bottom line? *Journal of Management*, 31, 464-481

Holburn, G. L. F., & Vanden Bergh, R. G. (2008). Making friends in hostile environments: political strategy in regulated industries, *Academy of Management Review*, 33(2), 521-540

Holmstrom, B. (1979). Moral hazard and observability. Bell Journal of Economics, 14, 74-91

Holmstrom, B. (1987). "*Incentive compensation: Practical design from a theory point of view*" In Haig R, Nalbantian (ed.), Incentives, Cooperation, and Risk Sharing: Economic and Psycological Perspectives on Employment Contracts: 176-185, Totowa, NJ: Rowman and Littlefield

Jensen, M., & Murphy, K. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98, 225-264

Jensen, M. C., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics,* 3, 305-360

Joireman, S. F. (2001). Inherited Legal Systems and Effective Rule of Law: Africa and the colonial legacy. *Journal of Modern African Studies*, 39(4), 571-596

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. Econometrica, 47, 262-291

Khanna, T., & Palepu, K. 2000. Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *Journal of Finance*, 55(2): 867-891

Khanna, T., & Rivkin, J. W. 2001. Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22: 45-74

Khanna, T., & Yafeh, Y. 2007. Business groups in emerging markets: Paragons or Parasites? *Journal of Economic Literature*, 45(2): 331-372

Khavul, S., Bruton, G. D., & Wood, E. 2009. Informal family business in Africa. *Entrepreneurship Theory and Practice*, 33(6): 1219-1238

Kim, H., Hoskisson, R., & Wan, W. 2004. Power dependence, diversification strategy, and performance in keiretsu member firms. Strategic Management Journal, 25(7): 613-636

Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: the case of the multinational enterprise. *Academy of Management Review*, 24(1), 64–81

Kuran, T. 2004. Why the Middle East is economically underdeveloped: historical mechanisms of institutional stagnation. *Journal of Economic Perspectives*, 18(3): 71-90.

Kuran, T. (2009). Explaining the economic trajectories of civilizations: The systemic approach. *Journal of Economic Behavior and Organization*, 71, 593-605

LenkaBula, P. (2008). Beyond anthropocentricity – Botho/Ubuntu and the quest for economic and ecological justice in Africa. *Religion & Theology*, 15, 375-394

Lester, R. H., Hillman, A., Zardkoohi, A., & Cannella, A. A. (2008). Former government officials as outside directors: the role of human and social capital. *Academy of Management Journal*, 51(5), 999-1013

Levinthal, D. (1988). A survey of agency models of organizations. *Journal of Economic Behaviour and Organization*, 9, 153-185

Liu, X., Lu, J., & Chizema, A. (2014). Top executive compensation, regional institutions and Chinese OFDI. *Journal of World Business*, 49, 143-155

Lutz, D. W. (2009). African Ubuntu philosophy and global management. *Journal of Business Ethics*, 84, 313-328

Mangaliso, M. P., & Damane, M. B. (2001). Building competitive advantage from "Ubuntu": Management lessons from South Africa. *The Academy of Management Executive*, 15(3), 23-34

Morck, R., Shleifer, A., & Vishny, R. W. (1989). Alternative mechanisms for corporate control. *American Economic Review*, 79, 842-852

North, D. (1989). Institutions and economic growth: an historical introduction. *World Development*, 17(9), 1319-1332

North, D. (1990). A Transaction Cost Theory of Politics. *Journal of Theoretical Politics*, 2(4), 355-367

North, D. C. (1991). Institutions. *The Journal of Economic Perspectives*, 5(1), 97-112

North, D. C. (1993). Institutions and credible commitment. *Journal of Institutional and Theoretical Economics*, 149(1), 11-23

North, D. C. (2010). Economics and cognitive science. *Procedia Social and Behavioural Sciences*, 2, 7371-7376

Nunn, N. (2007). Historical legacies: a model linking Africa's past to its current underdevelopment. *Journal of Development Economics*, 83, 157-175

Nunn N. (2008). The long term effects of Africa's slave trades. *Quarterly Journal of Economics*, 123(1), 139-176

Nunn, N., & Wantchekon, L. (2011). The slave trade and the origins of mistrust in Africa. *American Economic Review*, 101(7), 3221-3252

Nunn, N., & Puga, D. (2012). Ruggedness: the blessing of bad geography in Africa. *The Review of Economics and Statistics*, 94(1), 20-36

Oliver, C., & Holzinger, I. (2008). The effectiveness of strategic political management: a dynamic capabilities framework. *Academy of Management Review*, 33(2), 496-520

Oxelheim, L., & Randøy, T. (2005). The Anglo-American financial influence on CEO compensation in non-Anglo-American firms. *Journal of International Business Studies*, 36(4), 470–483

Peng, M. W., Li Sun, S., Pinkham, B., & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives*, 23(3), 63-81

Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence perspective. New York: Harper & Row

Renneboog, L., & Zhao, Y. (2011). Us knows us in the UK: On director networks and CEO compensation. *Journal of Corporate Finance*, 17, 1132-1157

Sanders, W. M. G., & Carpenter, M. A. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition and board structure. The *Academy of Management Journal*, 41(2), 158-178

Scott, W. R. (1995). *Institutions and organizations*. Sage Publications Inc.

Shavell, S. (1979). Risk sharing and incentives in the principal and agent relationship. *Bell Journal of Economics*, 10, 55-73

Stiglitz, J. E. (1987). "The design of labour contracts" In Haig R, Nalbantian (ed.), Incentives, Cooperation, and Risk Sharing: Economic and Psycological Perspectives on Employment Contracts: 176-185, Totowa, NJ: Rowman and Littlefield

Transparency International (2014). Corruption perceptions index. http://www.transparency.org/ Accessed 15 September 2014

Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460

Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/Board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 40(1), 60-83

West, A. (2014). Ubuntu and business ethics: Problems, perspectives and prospects. *Journal of Business Ethics*, 121, 47-61

Williamson, O. (1984). Corporate governance. *Yale Law Journal*, 93, 1197-1229

Wiseman, R. M., & Gomez-Mejia, L. R. (1998). A behavioural agency model of managerial risk taking. *The Academy of Management Review*, 23(1), 133-153

Zajac, E. J., & Westphal, J. D. (1995). Accounting for the explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, 40(2), 283-308

Zimmerman, M. A., & Zeitz, G. J. (2002). Beyond survival: achieving new venture growth by building legitimacy. *Academy of Management Review*, 27(3), 414–431

Table 1. Descriptive statistics for final African sample of private sector IPO firms

This table reports the mean and standard deviation for the average board base salary (total board base salary divided by board size) for the final sample of 136 private sector IPO firms. Board compensation terms are in US$ in year immediately preceding IPO. Values reported are country averages of the individual firm values. All variables are sourced direct from IPO listings prospectuses. Board composition is the percentage proportion of the board made up from the four classifications of social elites: military, governmental, university or commercial. Average values for the aggregate of the six political, governmental, regulatory and legal institutional quality indices (see Kaufman et al, 2009). Institutional quality indicators 1 to 6 have been rescaled on a 0-1 scale and reported as percentages. Indicators compiled from Kaufmann et al. (2009) "Governance Matters VIII: Governance Indicators for 1996-2008". World Bank Policy Research June 2009, downloaded from http://www.govindicators.org. **N** is the final sample size of genuine private sector IPO firms.

Market	N	Average individual executive	Proportion sample missing	Board composition social elites (% ratio to board size)					Institutional quality	GDP per Capita
		Base Salary		Overall	Military	Government	University	Commerce	Aggregate	Overall
		US$	%	%	%	%	%	%	%	US$
North Africa										
Egypt	7	131,785.03	14.29	11.02	0.00	2.04	0.00	8.98	42.89	1,383.02
Morocco	35	94,489.69	8.57	4.65	0.00	2.48	0.00	2.17	46.98	2,125.49
Tunisia	28	57,615.47	10.71	1.39	0.00	0.00	0.00	1.39	50.76	3,633.64
Algeria	1	1,224,000.00	0.00	14.29	0.00	7.14	0.00	7.14	34.24	3,143.63
East Africa										
Kenya	5	443,138.00	0.00	38.91	0.00	18.41	0.00	20.50	39.45	568.85
Mauritius	3	70,950.51	0.00	27.78	0.00	11.11	0.00	25.00	71.55	5,992.36
Tanzania	2	104,522.61	50.00	8.33	0.00	8.33	0.00	0.00	46.58	444.40
West Africa										
Nigeria	24	193,321.36	0.00	28.71	2.86	15.61	4.84	5.40	29.86	847.28
BVRM	4	247,435.76	50.00	2.94	0.00	1.56	0.00	9.19	42.12	967.15
Ghana	10	26,388.81	0.00	14.28	4.10	6.10	1.77	2.31	53.37	540.49
Cape Verde Is.	1	25,798.36	0.00	0.00	0.00	0.00	0.00	0.00	58.59	2,030.66
Sierra Leone	1	9,441.78	0.00	80.00	0.00	60.00	0.00	20.00	38.56	435.41
Southern Africa										
Botswana	6	268,418.08	0.00	17.68	0.00	17.68	0.00	0.00	69.09	5,567.07
Malawi	1	18,479.70	0.00	14.29	0.00	14.29	0.00	0.00	48.94	235.92
Zambia	1	34,150.20	0.00	33.33	0.00	33.33	0.00	0.00	47.34	668.64
Namibia	2	103,761.56	0.00	25.60	0.00	25.60	0.00	0.00	61.84	3,944.31
South Africa	5	297,292.43	0.00	12.67	0.00	9.33	0.00	3.33	61.36	5,372.25
Overall	136	141,291.01	7.86	13.08	0.81	7.38	1.13	4.33	46.78	2,292.65

Table 2. Descriptive statistics for final African sample of private sector IPO firms

This table reports the proportions of private sector IPOs that retain founder as CEO where this is further disaggregated into proportions that retain non-family founder as CEO and those retaining family founder as CEO. The proportion of IPOs that are nuclear family firms are detailed – where nuclear family is defined in the Western rubric of immediate family members. The proportions of IPOs that are business groups are reported with this being disaggregated into proportions of family and non-family business groups. Finally five classes of cash-flow ownership post-IPO are reported. These are ownership by business angel, venture capitalist, insider board, corporate block entity and family. Family includes both nuclear family and extended family groups that are prevalent in forming business groups.

Market	Proportions of all IPOs							Cash-Flow Ownership				
	CEO Founder			Nuclear Family Firm	Business Groups			Business Angel	Venture Capital	Board	Corporate Block	Family
	Overall	Non-Family	Family		Overall	Family	Non-Family					
	%	%	%	%	%	%	%	%	%	%	%	%
North Africa												
Egypt	57.14	0.00	57.14	42.86	42.86	42.86	0.00	5.57	7.00	18.18	0.00	50.69
Morocco	40.00	5.71	34.29	22.86	57.14	48.57	8.57	1.75	5.55	15.24	4.30	46.79
Tunisia	60.71	17.86	42.86	25.00	57.14	50.00	7.14	1.07	5.75	17.62	1.79	41.79
Algeria	100.00	0.00	100.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	67.53
East Africa												
Kenya	40.00	20.00	20.00	20.00	20.00	0.00	20.00	1.80	7.74	33.66	21.63	0.00
Mauritius	66.67	0.00	66.67	33.33	33.33	33.33	0.00	2.30	6.95	24.97	18.75	52.64
Tanzania	50.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.76	17.07	0.00
West Africa												
Nigeria	62.50	37.50	25.00	4.17	41.67	33.33	8.33	2.99	2.59	25.71	3.07	21.36
BVRM	0.00	0.00	0.00	0.00	100.00	0.00	100.00	3.48	12.34	0.00	19.80	16.01
Ghana	60.00	40.00	20.00	30.00	10.00	0.00	10.00	1.56	4.66	40.85	7.95	18.83
Cape Verde Is.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.90	0.00
Sierra Leone	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.93	0.00	0.00
Southern Africa												
Botswana	33.33	16.67	16.67	16.67	16.67	0.00	16.67	3.05	10.23	38.37	18.40	2.33
Malawi	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	10.46	80.00	3.00	0.00
Zambia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.00	0.00	0.00
Namibia	50.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	7.41	67.07	0.00	0.00
South Africa	20.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	12.71	20.17	23.74	0.00
Overall	49.26	19.12	30.15	18.38	43.38	32.35	11.03	1.96	5.68	22.79	6.97	30.64

Table 3. Correlations for sample of private sector IPO firms
Table presenting Pearson correlations between all variables. All variables are as defined in Table 2.

		1	2	3	4	5	6	7	8	9	10
1	Log (Average executive base salary)	1.000									
2	Ratio Social Elites Military	-0.013	1.000								
3	Ratio Social Elites Government	-0.060	-0.004	1.000							
4	Ratio Social Elites Commercial	-0.032	0.124*	-0.013	1.000						
5	Ratio Social Elites University	-0.095	0.013	0.231††	0.070	1.000					
6	Aggregate Institutional Quality	-0.163	-0.079	-0.077	-0.063	-0.359††	1.000				
7	Board Size	0.057	-0.030	-0.055	-0.093	-0.030	-0.100	1.000			
8	Ratio Independent Nonexecutives	-0.009	-0.053	0.191**	0.056	-0.056	0.250††	-0.212†	1.000		
9	Log (Average executive tenure)	0.045	-0.054	-0.204**	-0.023	-0.015	-0.134*	-0.017	-0.103	1.000	
10	Ratio Business Group directors to board	-0.003	-0.048	-0.175**	-0.032	0.049	-0.084	0.184†	-0.305††	-0.053	1.000
11	Log (Revenue)	0.362††	-0.012	-0.121*	0.045	-0.092	-0.029	0.219†	0.136*	0.065	0.174**
12	ROA	0.172**	-0.109	-0.101	0.301††	-0.054	0.104	-0.201†	0.062	0.024	-0.068
13	Log (Firm Age)	0.090	-0.044	-0.133*	-0.163**	-0.054	-0.055	0.288††	-0.098	0.304††	0.020
14	Total Debt to Total Assets	0.100	0.018	0.019	0.075	0.019	-0.115	0.135*	0.022	-0.064	0.112
15	Ratio Offer Size to Total Shares Issued	-0.065	0.299††	0.094	0.090	0.227†	-0.178††	-0.111	0.164**	-0.193**	-0.213†
16	BA ownership	-0.183**	-0.021	0.080	-0.061	0.055	-0.105	0.063	0.032	0.053	0.064
17	VC ownership	0.050	-0.098	-0.064	-0.115	-0.122*	0.146*	0.125*	0.047	-0.058	-0.091
18	Aggregate board ownership	-0.103	0.134*	0.138*	0.236††	0.122*	0.116	-0.192**	0.176**	-0.025	-0.276††
19	Corporate block ownership	0.067	-0.086	0.193**	-0.096	-0.113*	0.203††	-0.135*	0.314††	-0.179**	-0.225††
20	Family ownership	-0.019	-0.080	-0.355††	-0.013	-0.084	-0.017	0.147*	-0.317††	0.224††	0.553††
21	Log (GDP per capita)	0.009	-0.203**	-0.212†	-0.089	-0.320††	0.625††	0.140*	0.006	-0.107	0.110

* Significance p < 0.10;
** Significance p < 0.05;
† Significance p < 0.01;
†† Significance p < 0.005

Table 3. continued

		11	12	13	14	15	16	17	18	19	20	21
1	Log (Average executive base salary)											
2	Ratio Social Elites Military											
3	Ratio Social Elites Government											
4	Ratio Social Elites Commercial											
5	Ratio Social Elites University											
6	Aggregate Institutional Quality											
7	Board Size											
8	Ratio Independent Nonexecutives											
9	Log (Average executive tenure)											
10	Ratio Business Group directors to board											
11	Log (Revenue)	1.000										
12	ROA	0.055	1.000									
13	Log (Firm Age)	0.289††	-0.137*	1.000								
14	Total Debt to Total Assets	0.071	0.430††	-0.095	1.000							
15	Ratio Offer Size to Total Shares Issued	-0.155**	0.086	-0.056	0.062	1.000						
16	BA ownership	-0.045	-0.096	-0.019	-0.012	-0.065	1.000					
17	VC ownership	-0.053	-0.092	0.093	-0.032	-0.009	0.085	1.000				
18	Aggregate board ownership	-0.004	0.198**	-0.222††	-0.066	0.221†	-0.035	-0.094	1.000			
19	Corporate block ownership	-0.005	-0.075	0.032	-0.020	-0.031	-0.099	-0.039	-0.210†	1.000		
20	Family ownership	0.084	0.103	0.098	0.064	-0.317††	-0.024	-0.225†	-0.274††	-0.399††	1.000	
21	Log (GDP per capita)	0.174**	0.098	-0.028	0.026	-0.292††	-0.057	0.131*	-0.132*	-0.003	0.190**	1.000

* Significance p < 0.10;
** Significance p < 0.05;
† Significance p < 0.01;
†† Significance p < 0.005

Table 4. The impact of external institutional quality on director fixed base salary
Regression results using the natural logarithm of aggregate board salary as the dependent variable.   All independent and control variables are defined in Table 2.

	Ln (Average executive fixed base salary)			
	Model 1	Model 2	Model 3	Model 4
Intercept	34.100 [0.60]	25.329 [0.42]	19.219 [0.30]	13.173 [0.22]
Independent variables				
H1: Ratio Social Elites	**15.808 [2.64] ††**	-- --	-- --	-- --
H2: Ratio Social Elites x Institutional Quality	**-34.155 [-2.72] ††**	-- --	-- --	-- --
Ratio Social Elites Military	-- --	**8.986 [1.68]****	24.396 [1.38]*	20.563 [1.32]*
Ratio Social Elites Military x Institutional Quality	-- --	-- --	**-36.394 [-1.29]***	-27.792 [-0.72]
Ratio Social Elites Government	-- --	-0.021 [-0.01]	**13.261 [1.79]****	**11.773 [1.75]****
Ratio Social Elites Government x Institutional Quality	-- --	-- --	**-29.388 [-1.86]****	**-26.320 [-1.79]****
Ratio Social Elites Commerce	-- --	-2.071 [-0.89]	5.055 [0.52]	-- --
Ratio Social Elites Commerce x Institutional Quality	-- --	-- --	-13.448 [-0.70]	-- --
Ratio Social Elites University	-- --	-0.177 [-0.03]	22.255 [0.84]	-- --
Ratio Social Elites University x Institutional Quality	-- --	-- --	-64.597 [-0.80]	-- --
Institutional control				
Aggregate Institutional Quality	-10.148 [-0.67]	-9.610 [-0.58]	-11.415 [-0.65]	-16.722 [-1.02]
Board controls				
Board Size	-0.070 [-1.36]*	-0.035 [-0.52]	-0.057 [-0.82]	-0.067 [-0.99]
Ratio Independent Nonexecutives	-1.197 [-0.91]	-1.952 [-1.40]*	-1.220 [-0.82]	-1.427 [-1.37]*
Log (Average executive tenure)	-0.248 [-0.94]	-0.298 [-1.37]*	-0.270 [-0.92]	-0.297 [-1.33]*
Ratio Business Group directors to board	-0.695 [-0.96]	-0.381 [-0.51]	-0.665 [-0.88]	-0.534 [-0.73]
Firm controls				
Size: Log (Revenue)	1.080 [3.21] ††	0.949 [2.70] ††	1.095 [2.85] ††	1.153 [3.19] ††
Performance: ROA	2.180 [1.37]*	1.929 [0.97]	2.278 [0.88]	1.007 [0.54]
Age: Log (Firm Age)	-0.575 [-1.31]*	-0.605 [-1.31]*	-0.586 [-0.97]	-0.633 [-1.39]*
Leverage: Total Debt to Total Assets	-0.573 [-0.62]	-0.421 [-0.43]	-0.528 [-0.51]	-0.656 [-0.70]
IPO controls				
Ratio Offer Size to Total Shares Issued	-1.772 [-1.55]*	-2.394 [-1.73]**	-2.371 [-1.67]**	-2.333 [-1.71]**
Ownership controls				
BA ownership	-0.162 [-3.07] ††	-0.152 [-2.75] ††	-0.169 [-3.03] ††	-0.166 [-3.05] ††
VC ownership	0.033 [1.73]**	0.027 [1.35]*	0.030 [1.44]*	0.030 [1.57]*
Aggregate board ownership	0.003 [0.39]	0.005 [0.49]	0.003 [0.27]	0.003 [0.30]
Corporate block ownership	-0.019 [-0.89]	-0.012 [-0.57]	-0.016 [-0.73]	-0.012 [-0.58]
Family ownership	0.010 [1.09]	0.007 [0.70]	0.008 [0.77]	0.006 [0.58]
Economic control				
Log (GDP per capita)	-1.436 [-0.18]	-0.422 [-0.05]	0.572 [0.06]	1.626 [0.19]
Country effects	Yes	Yes	Yes	Yes
Industry effects	Yes	Yes	Yes	Yes
Time (year) effects	Yes	Yes	Yes	Yes
F-test	3.48 [0.00]	3.03 [0.00]	2.94 [0.00]	3.21 [0.00]
SSE	187.47	197.61	182.56	189.33
Observations	119	119	119	119
Adjusted R^2	0.5359	0.4947	0.5004	0.5159

Notes: (1) T-statistics are in parentheses; (2) White cross-section standard errors & covariance (d.f. corrected) to account for period clustering
* Significance $p < 0.10$; ** Significance $p < 0.05$; † Significance $p < 0.01$; †† Significance $p < 0.005$

Table 5. The impact of external institutional quality on director fixed base salary

Regression results using the natural logarithm of aggregate board salary as the dependent variable.   All independent and control variables are defined in Table 2.

	Ln (Average executive fixed base salary)					
	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6
Intercept	12.486 [0.19]	15.785 [0.24]	37.471 [0.57]	31.881 [0.50]	24.757 [0.39]	32.694 [0.53]
Independent variables						
Ratio Social Elites Military	**23.518 [1.39]***	**25.958 [1.34]***	**17.334 [1.33]***	**43.487 [1.38]***	**29.654 [1.31]***	**25.759 [1.33]***
Ratio Social Elites Military x Institutional Quality (n)	-44.077 [-0.81]	-42.500 [-0.80]	-16.571 [-0.60]	**-69.314 [-1.30]***	**-48.376 [-1.32]***	**-33.258 [-1.30]***
Ratio Social Elites Government	**7.179 [1.33]***	**12.119 [1.51]***	**7.288 [1.29]***	**11.405 [1.31]***	**11.213 [1.45]***	**15.555 [2.12]****
Ratio Social Elites Government x Institutional Quality (n)	**-21.767 [-1.41]***	**-28.856 [-1.69]****	**-14.197 [-1.35]***	**-21.753 [-1.30]***	**-23.569 [-1.46]***	**-31.336 [-2.21]****
Ratio Social Elites Commerce	4.133 [0.57]	1.241 [0.12]	6.764 [0.73]	4.248 [0.31]	5.877 [0.62]	-0.171 [-0.03]
Ratio Social Elites Commerce x Institutional Quality (n)	-15.485 [-0.80]	-6.877 [-0.32]	-15.766 [-0.98]	-11.946 [-0.50]	-13.682 [-0.78]	-2.565 [-0.20]
Ratio Social Elites University	11.765 [0.70]	15.758 [0.45]	7.689 [0.54]	21.516 [0.55]	22.645 [0.97]	**48.284 [1.58]***
Ratio Social Elites University x Institutional Quality (n)	-56.227 [-0.71]	-42.793 [-0.39]	-18.918 [-0.40]	-48.405 [-0.49]	-67.242 [-0.96]	**-108.407 [-1.56]***
Institutional quality (n)						
Dimension 1: Corruption Control	-9.091 [-0.92]					
Dimension 2: Effective Government		-0.211 [-0.01]				
Dimension 3: Political Stability			8.678 [0.96]			
Dimension 4: Regulatory Quality				14.617 [1.30]*		
Dimension 5: Rule of Law					-12.138 [-1.32]*	
Dimension 6: Voice & Accountability						-1.175 [-0.20]
Institutional Controls						
Aggregate of remaining 5 institutional dimensions	4.211 [0.20]	-13.972 [-0.76]	-18.997 [-1.21]	-24.551 [-1.40]*	0.250 [0.01]	-8.252 [-0.55]
Board controls						
Board Size	-0.026 [-0.35]	-0.059 [-0.81]	-0.034 [-0.44]	-0.054 [-0.76]	-0.079 [-1.30]*	-0.052 [-0.73]
Ratio Independent Nonexecutives	-1.453 [-1.30]*	-1.369 [-0.90]	-1.233 [-0.81]	-1.901 [-1.29]*	-1.808 [-1.29]*	-0.393 [-0.26]
Log (Average executive tenure)	-0.279 [-0.96]	-0.272 [-0.90]	-0.146 [-0.48]	-0.201 [-0.67]	-0.273 [-0.92]	-0.278 [-0.90]
Ratio Business Group directors to board	-0.716 [-0.95]	-0.665 [-0.85]	-0.623 [-0.80]	-0.652 [-0.85]	-0.690 [-0.91]	-0.478 [-0.65]
Firm controls						
Size: Log (Revenue)	1.006 [2.70] ††	1.157 [2.84] ††	1.024 [2.59] ††	1.012 [2.51] †	1.020 [2.70] ††	1.157 [3.12] ††
Performance: ROA	2.792 [1.38]*	1.933 [0.73]	2.506 [1.31]*	2.704 [1.33]*	2.146 [0.88]	0.823 [0.33]
Age: Log (Firm Age)	-0.470 [-0.77]	-0.620 [-1.30]*	-0.562 [-0.91]	-0.529 [-0.87]	-0.615 [-1.32]*	-0.608 [-1.33]*
Leverage: Total Debt to Total Assets	-0.555 [-0.53]	-0.582 [-0.55]	-0.491 [-0.46]	-0.097 [-0.09]	-0.289 [-0.27]	-0.826 [-0.80]
IPO controls						
Ratio Offer Size to Total Shares Issued	-2.529 [-1.80]**	-2.492 [-1.70]**	-2.592 [-1.76]**	-2.810 [-1.95]**	-2.764 [-1.93]**	-2.106 [-1.48]*
Ownership controls						

BA ownership	-0.150 [-2.57] ††	-0.172 [-2.98] ††	-0.155 [-2.61] ††	-0.169 [-3.00] ††	-0.179 [-3.11] ††	-0.156 [-2.85] ††
VC ownership	0.029 [1.41]*	0.030 [1.42]*	0.029 [1.41]*	0.034 [1.69]**	0.033 [1.59]*	0.030 [1.52]*
Aggregate board ownership	0.004 [0.40]	0.002 [0.24]	0.004 [0.44]	0.005 [0.47]	0.005 [0.53]	0.003 [0.29]
Corporate block ownership	-0.017 [-0.80]	-0.015 [-0.65]	-0.009 [-0.40]	-0.013 [-0.62]	-0.012 [-0.55]	-0.014 [-0.61]
Family ownership	0.009 [0.86]	0.006 [0.59]	0.010 [0.89]	0.008 [0.80]	0.007 [0.66]	0.010 [1.01]
Economic control						
Log (GDP per capita)	0.792 [0.09]	1.150 [0.12]	-2.203 [-0.23]	-1.258 [-0.14]	0.031 [0.01]	-1.264 [-0.14]
Country effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry effects	Yes	Yes	Yes	Yes	Yes	Yes
Time (year) effects	Yes	Yes	Yes	Yes	Yes	Yes
F-test	2.94 [0.00]	2.76 [0.00]	2.82 [0.00]	2.87 [0.00]	2.89 [0.00]	3.02 [0.00]
SSE	177.73	186.78	183.74	181.32	179.94	174.08
Observations	119	119	119	119	119	119
Adjusted R^2	**0.5050**	0.4797	0.4882	0.4949	0.4988	**0.5151**

Notes: (1) T-statistics are in parentheses; (2) White cross-section standard errors & covariance (d.f. corrected) to account for period clustering

* Significance $p < 0.10$;

** Significance $p < 0.05$;

† Significance $p < 0.01$;

†† Significance $p < 0.005$